

REMARKS/ARGUMENTS

The present application has been reviewed in light of the Final Office Action mailed March 22, 2011. Claims 100 and 103-108 are currently pending, claims 1-99, 101-102 and 109-110 having been previously cancelled. Claims 100 and 103 have been amended herein. Claim 100 is in independent form. Reconsideration of the present application is respectfully requested. Applicants reserve the right to file one or more Continuation and/or Divisional Applications as appropriate. No new matter has been added by the present amendment.

Claims 100, 103, 104, and 106-108 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,609,285 to Grant et al. in view of U.S. Patent No. 5,669,918 to Balazs et al., U.S. Patent No. 6,050,472 to Shibata, and U.S. Patent No. 5,855,312 to Toledano. Applicants respectfully submit, however, that Grant in view of Balazs, Shibata, and Toledano fails to disclose each and every element recited in amended independent claim 100.

As the BPAI reiterated in In re Wada and Murphy, an obviousness rejection under § 103 requires a suggestion of *all limitations in a claim*. Appeal 2007-3733 (B.P.A.I. Jan. 2008) (citing In re Royka, 490 F.2d 981, 985 (CCPA 1974); emphasis added). If the references, alone or in combination, do not teach or suggest each and every element of the claim, then the references cannot support a rejection under § 103. See id.

Independent claim 100 recites a surgical device including, *inter alia*:

“an anvil sleeve guide having one or more keyways disposed on an interior surface and a lip disposed on an exterior surface, such that a proximal portion of the anvil sleeve guide has a greater radius than a distal portion of the anvil sleeve guide; and

an outer housing sleeve having one or more openings distally disposed and a radially inwardly-extending lip proximally disposed, such that the outer housing sleeve slidably receives a staple pusher carriage element for actuating a stapler pusher and a staple cartridge...” (Emphasis added.)

Support for such features can be found at least at paragraphs [0100] and [0101] of the present published application (2005/0187576) and FIGS. 10(a) and 10(b), reproduced on the next page.

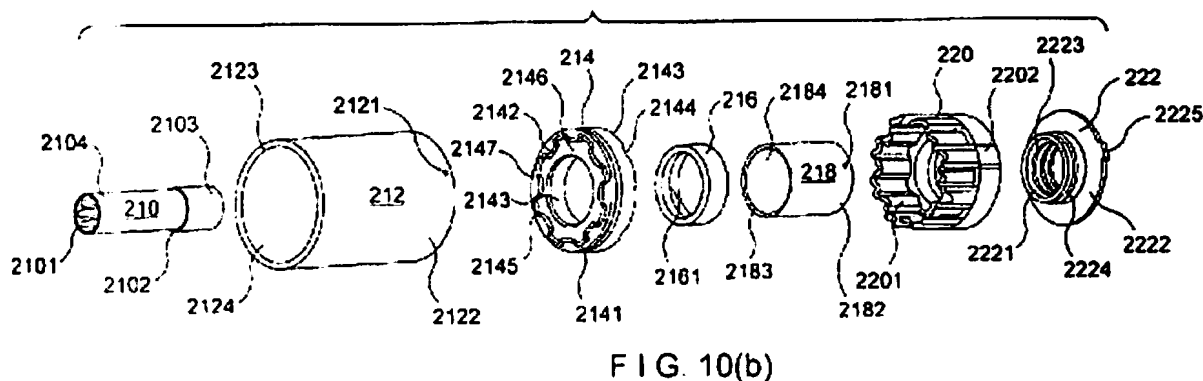
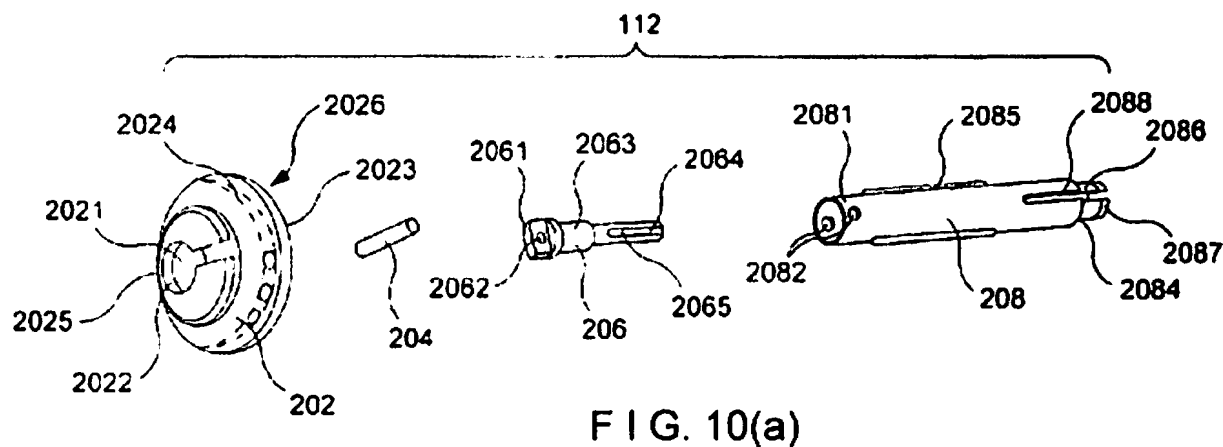
Specifically, paragraph [0100] states:

“FIG. 10(b) is a perspective view that illustrates some of the components of the staple and blade portion 106, according to one embodiment of the present invention. FIG. 10(b) shows the components in an exploded condition. As shown in FIG. 10(b), the staple and blade portion 106 includes a hollow anvil sleeve guide 210. The inner surface of the anvil sleeve guide 210 includes one or more keyways 2101. The outer surface of the anvil sleeve guide 210 includes a lip 2102, such that a proximal end 2103 of the anvil sleeve guide 210 has a larger radius than a distal end 2104 of the anvil sleeve guide 210.” (Emphasis added.)

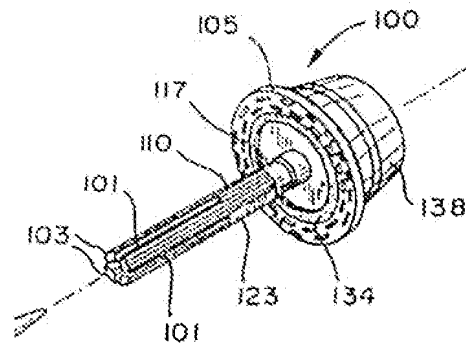
Specifically, paragraph [0101] states:

“The staple and blade portion 106 also includes an outer housing sleeve 212. The outer housing sleeve 212 has one or more openings 2121 at its distal end 2122, and a radially inwardly-extending lip 2123 at the distal end 2124 of the outer housing sleeve 212. The staple and blade portion 106 also includes a staple cartridge 214. The staple cartridge 214 defines a plurality of axially-disposed staple receiving slots 2141 in which staples 2142 are stored. In the embodiment shown in FIG. 10(b), the staple receiving slots 2141 are disposed circumferentially around the staple cartridge 214 in two radially-spaced apart rows, wherein the staple receiving slots 2141 in the first row overlap the staple receiving slots 2141 in the second row. The staple cartridge 214 also includes a radially inwardly-extending lip 2145 located near the distal end 2147 of the staple cartridge 214 and a radially outwardly-extending lip 2143 located near the proximal end 2144 of the staple cartridge 214. Furthermore, the distal end 2147 of the staple cartridge 214 defines a clamping face 2146.” (Emphasis added.)

As such, Applicants submit that the anvil sleeve guide 210 is configured to cooperate with the anvil sleeve 208 and the anvil extension rod 206 of the anvil assembly 112. Therefore, retraction of the trocar shaft 108 causes the anvil sleeve 108 to move proximally within the anvil sleeve guide 210 until the rim 2523 of the central rear endcap sleeve 252 seats within the recess 2086 of the anvil sleeve 208 (see paragraph [0124]).



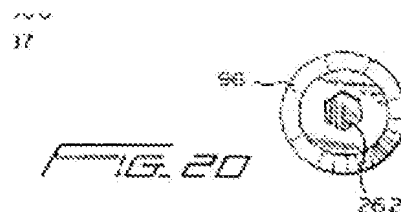
In contrast, Applicants submit that Grant, as seen in the excerpt of FIG. 10 of Grant reproduced on the next page, relates to a surgical anastomosis stapling instrument including an anvil assembly 100 having an anvil shaft 110 defining a plurality of longitudinal slits 101 extending from its proximal end, which divide the anvil shaft 110 into a set of elongated, resilient fingers 103. According to Grant, the anvil shaft 110 is divided by the longitudinal slits 101 into four fingers 103, which can be flexed apart by the trocar tip 210 to allow the trocar 200 to be inserted in and removed from the anvil shaft 110. (see Col. 13, lines 48-55).



Excerpt of FIG. 10 of Grant

Additionally, Grant merely refers to a sleeve 262, as shown in FIG. 20, reproduced below. For example, at Col. 17, lines 12-22, it is stated:

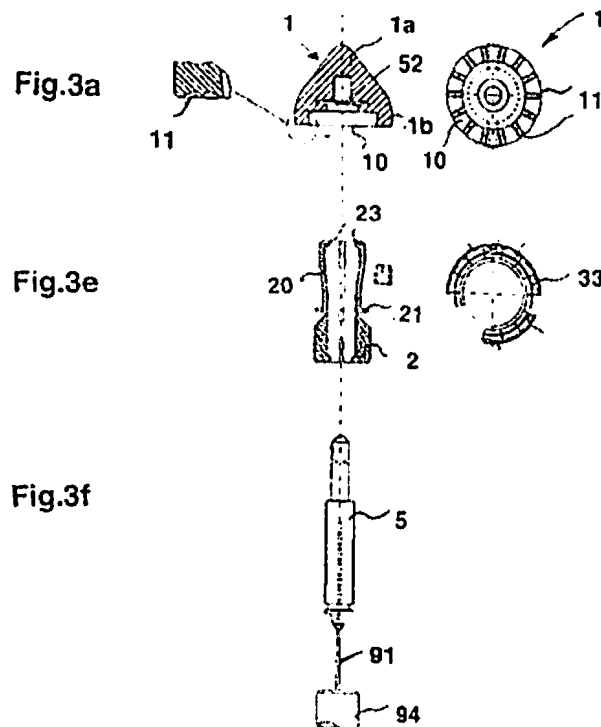
"The actuator handle 90 supports an elongated control rod 260 (FIG. 21) having its front end secured, e.g., by brazing or welding, to the inner tension-torsion cable 84. The control rod 260 is secured at its rear end to a sleeve 262 which is slidably received in an axial passageway 264 formed in the adjusting knob 96. The sleeve 262 is keyed to the passageway 264 such that the control rod 260 is slidably coupled to the adjusting knob 96 for simultaneous rotation therewith. For example, as shown in FIG. 20, the sleeve 262 and passageway 264 are hexagonal in configuration to couple the control rod 260 for rotation with the adjusting knob 96." (Emphasis added.)



However, nowhere does Grant refer to at least an anvil sleeve guide having one or more keyways disposed on an interior surface and a lip disposed on an exterior surface, such that a proximal portion of the anvil sleeve guide has a greater radius than a distal portion of the anvil sleeve guide, as currently recited in amended independent claim 100. Additionally, Grant does not refer to at least an outer housing sleeve that slidably receives a staple pusher carriage element

for actuating a stapler pusher and a staple cartridge, as currently recited in amended independent claim 100.

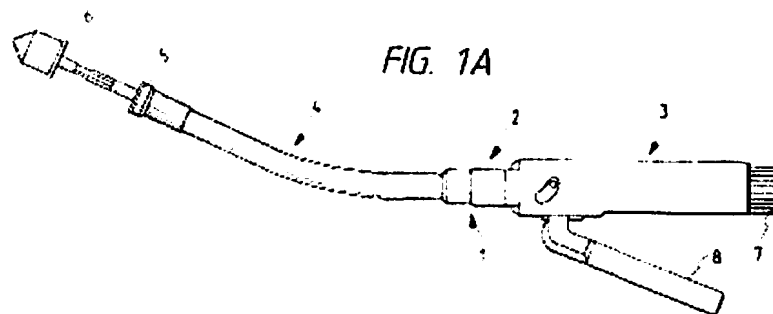
Next, Applicants submit that Balazs, as seen in FIGS. 3a, 3e, and 3f reproduced below, relates to a surgical instrument for preparing an anastomosis in minimally invasive surgery including an insertion head 1 defining radially oriented staple indentations 11, and a holder part 2 extending from insertion head 1 and defining a lumen therethrough for receiving a mandrel 5 therein from an end thereof.



However, nowhere does Balazs refer to at least an anvil sleeve guide having one or more keyways disposed on an interior surface and a lip disposed on an exterior surface, such that a proximal portion of the anvil sleeve guide has a greater radius than a distal portion of the anvil sleeve guide, as currently recited in amended independent claim 100. Additionally, Balazs does not refer to at least an outer housing sleeve that slidably receives a staple pusher carriage element

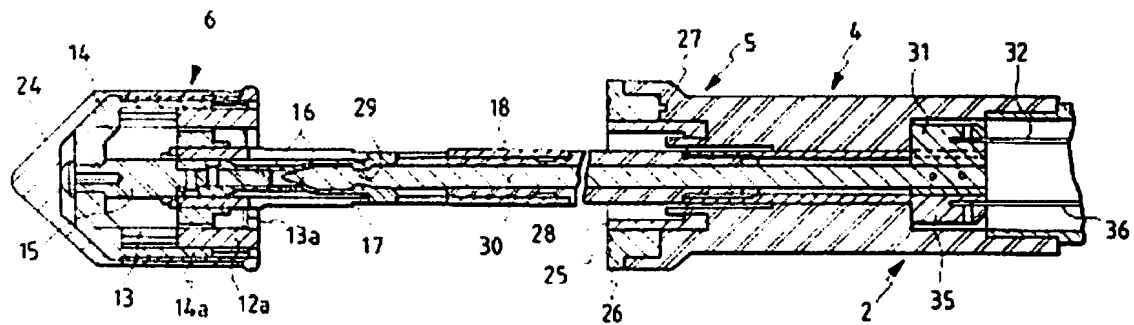
for actuating a stapler pusher and a staple cartridge, as currently recited in amended independent claim 100.

Next, Applicants submit that Shibata, as seen in FIGS. 1A and 2A reproduced below, relates to a medical suturing apparatus generally indicated by 1 that comprises a main body 2, which is composed of an operating member 3 and an insertion member 4 extending with a mild curvature from the operating member 3. At the distal end of the insertion member 4 is provided an anvil head 5. A staple head 6 is detachably provided on the anvil head 5. The operating member 3 is fitted with an adjusting knob 7, which is rotated to retract the staple head 6 toward the anvil head 5, and a lever 8 which is gripped to have staples 11 expelled as a tissue binding fastener from the staple head 6.



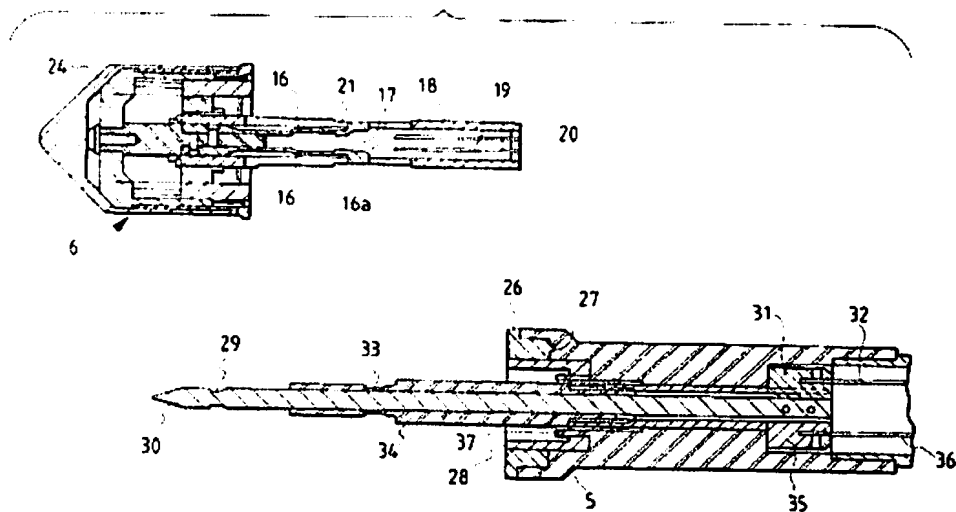
As shown in FIG. 2A, reproduced on the next page, the staple head 6 is fitted in a position opposed to the anvil head 5, which is provided at the distal end of the insertion member 4 and the staple head 6 normally contains a plurality of staples 11 in an annular array of recessed staple channels 12.

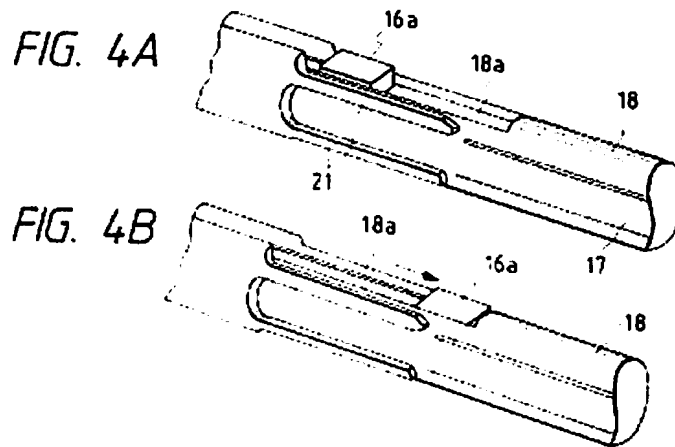
FIG. 2A



Additionally, as shown in FIGS. 3, 4A, and 4B of Shibata reproduced below, a pair of leaf springs 19 are molded on the anvil head side of the staple head sleeve 18. The distal end of each leaf spring 19 is provided with an inwardly projecting latch 20. Leaf spring guiding slots 18a are provided on the outer circumference of the staple head sleeve 18 for permitting the heads of leaf springs 16a to become flared to come outside of the outer circumference of the staple head sleeve 18. The leaf spring guiding slots 18a are sized to be longer than the axial length of the leaf spring heads 16a.

FIG. 3





As shown in FIG. 4A, reproduced above, a plurality of ribs 21 are provided on the outer circumference of the anvil head side of the staple head sleeve 18 as means of positioning it in the radial direction of staples 11.

However, nowhere does Shibata refer to at least an anvil sleeve guide having one or more keyways disposed on an interior surface and a lip disposed on an exterior surface, such that a proximal portion of the anvil sleeve guide has a greater radius than a distal portion of the anvil sleeve guide, as currently recited in amended independent claim 100. Additionally, Shibata does not refer to at least an outer housing sleeve that slidably receives a staple pusher carriage element for actuating a stapler pusher and a staple cartridge, as currently recited in amended independent claim 100.

Next, Applicants submit that Toledano, as seen in FIGS. 2 and 5A reproduced below, relates to an end portion of a flexible stapler having a flexible cable 21 that is slidably disposed inside flexible hose-like body 26 along its entire length. A segment 83 of the cable at the end that is generally attachable to head 11 is designated as the end segment. End segment 83, which slides through hole 34 in anvil 18 when the head is relatively close to the anvil, is made to be

substantially stiffer than the rest of the cable. The stiff end segment 83 is a separately produced component, to be called extension rod, which is attached to the end of cable 21.

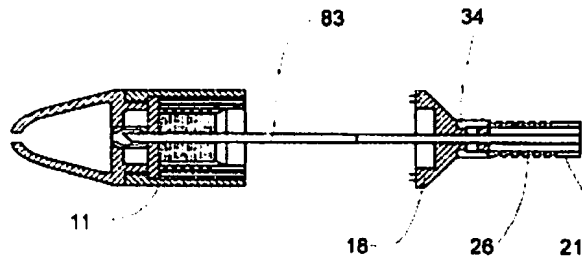


Fig. 2

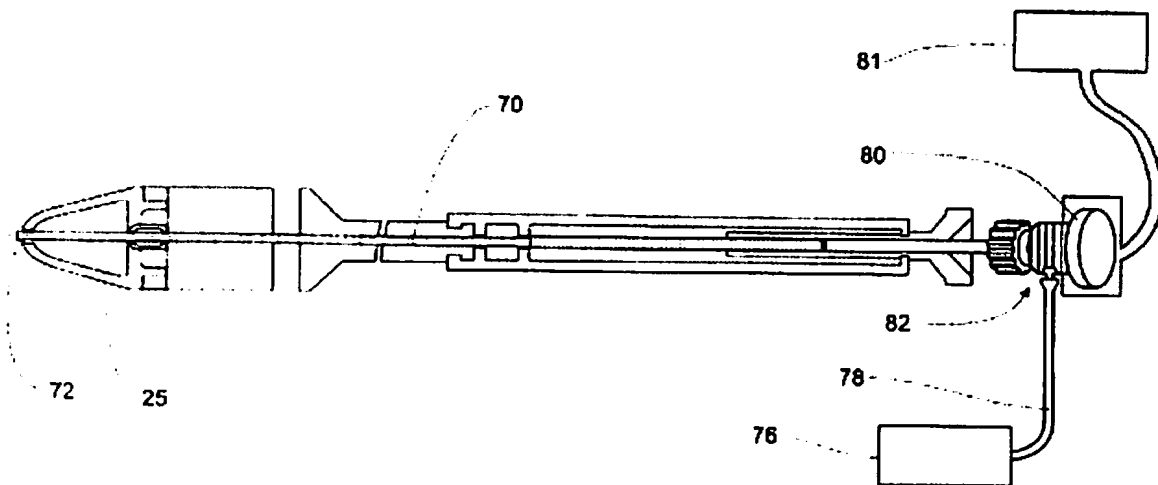


Fig. 5a

FIG. 5A of Toledano, depicts a flexible stapler with internal imaging facility. The end of the bundle of fibers 70 protrudes through a hole in the end cap of the head, where an objective lens assembly 72, serves to project an image of the surrounding inner wall of the intestines onto the near end of fiber bundle 70. Preferably a transparent balloon is stretched over end cap 25

(including the objective lens assembly) and inflated by air through the passageway. This aids in dilating the inner surface of the intestines and protects the surface of the lens. An illuminator 76 projects light into an illumination fiber 78, which runs through the passageway alongside fiber bundle 70 and whose other end also protrudes through the end cap, to illuminate the viewed area.

However, nowhere does Toledano refer to at least an anvil sleeve guide having one or more keyways disposed on an interior surface and a lip disposed on an exterior surface, such that a proximal portion of the anvil sleeve guide has a greater radius than a distal portion of the anvil sleeve guide, as currently recited in amended independent claim 100.

Additionally, Toledano does not refer to at least an outer housing sleeve that slidably receives a staple pusher carriage element for actuating a stapler pusher and a staple cartridge, as currently recited in amended independent claim 100.

Consequently, none of the references cited by the Examiner relate to an anvil sleeve guide, nor to an outer housing sleeve, as currently recited in amended independent claim 100.

Accordingly, in view of the foregoing amendments and remarks, Applicants respectfully submit that Grant in view of Balazs, Shibata, and Toledano fails to suggest or render obvious the features of independent claim 100. For at least these reasons, Applicants submit that the subject matter of independent claim 100, as a whole, is patentable under 35 U.S.C. §103(a) over Grant in view of Balazs, Shibata, and Toledano. Furthermore, since claims 103-104 and 106-108 depend from independent claim 100, and contain all of the limitations thereof, Applicants respectfully submit that the subject matter of claims 103-104 and 106-108, as a whole, is patentable for at least the reasons that independent claim 100 is patentable.

Claim 105 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Grant in view of Balazs, Shibata, and Toledano as applied to claim 108 above, and further in view of U.S. Patent No. 6,491,201 to Whitman. Applicants respectfully submit, however, that Grant in view of Balazs, Shibata, and Toledano, and further in view of Whitman fails to disclose each and every element recited in claim 105 as presented herein.

The Examiner relies on Whitman for the disclosure of a surgical instrument having a flexible shaft movable relative to a housing by way of a rotatable driver selectively rotated by at least one motor via a controller. However, even assuming the teachings of Whitman proffered by the Examiner are correct, Applicants submit that Whitman would fail to cure any deficiencies of Grant, Balazs, Shibata, and/or Toledano because Whitman fails to teach and/or suggest at least “an anvil sleeve guide having one or more keyways disposed on an interior surface and a lip disposed on an exterior surface, such that a proximal portion of the anvil sleeve guide has a greater radius than a distal portion of the anvil sleeve guide,” and/or “an outer housing sleeve having one or more openings distally disposed and a radially inwardly-extending lip proximally disposed, such that the outer housing sleeve slidably receives a staple pusher carriage element for actuating a stapler pusher and a staple cartridge,” as recited in independent claim 100.

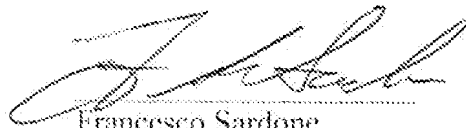
In view of the foregoing, for at least the reasons that amended independent claim 100 is allowable over Grant in view of Balazs, Shibata, and Toledano, and further in view of Whitman under 35 U.S.C. §103(a), *inter alia*, Applicants respectfully submit that claim 105 is also allowable under 35 U.S.C. §103(a) over Grant in view of Balazs, Shibata, and Toledano, and further in view of Whitman.

Should the Examiner believe that a telephone interview may facilitate prosecution of this application, or resolve any outstanding matters, the Examiner is sincerely invited to contact the Applicants' undersigned representative at the number indicated below.

Please charge any deficiency as well as any other fee(s) that may become due under 37 C.F.R. § 1.16 and/or 1.17 at any time during the pendency of this application, or credit any overpayment of such fee(s), to Deposit Account No. 21-0550.

In view of the foregoing amendments and remarks, reconsideration of the application and allowance of claims 100 and 103-108 is earnestly solicited.

Respectfully submitted,



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